swissonic

SA 125 CD

mixer amplifier

thomann
MUSIC IS OUR PASSION

user manual

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1 General notes

This user manual contains important information on safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to other users, be sure that they also receive this manual.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section provides an overview of the symbols and signal words used in this user manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.

Warning signs	Type of danger
	Warning – danger zone.

2 Safety notes

Intended use

This device is intended to be used for amplification, mixing and playback of signals from musical instruments and microphones. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety

DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.

DANGER!

Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

DANGER!

Electric shock caused by high voltages at the power amplifier output

The output voltages of modern high-performance amplifiers may result in death or serious injury.

Never touch the bare ends of loudspeaker cables when the amplifier is on.

DANGER!

Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.

CAUTION!

Possible hearing damage

With loudspeakers or headphones connected, the device can produce volume levels that may cause temporary or permanent hearing impairment.

Do not operate the device permanently at a high volume level. Decrease the volume level immediately if you experience ringing in your ears or hearing impairment.

NOTICE!

Risk of fire

Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

NOTICE!

Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

NOTICE!

Possible damages by using an external battery

Improper handling may cause an arc or short circuit between the bare ends of a live power cable to an external battery. This can destroy the battery and there is a fire hazard!

If you use an external battery for power supply, connect the power cord to the screw terminal on the rear panel first. Then connect the free ends of the cables to the battery poles. Pay attention to the polarity marking! To disconnect the battery, unscrew the cables on the battery first, then on the terminals of the device.

Also pay attention to the safety instructions of the battery manufacturer.

3 Features

- Built-in CD player
- 4 microphone/line inputs
- 24 V phantom powering
- Priority function
- AUX input, LINE output
- Input for external pre-amplifier
- Output for external power amplifier
- Screw terminals for loudspeakers, telephone system and mains-independent voltage supply

4 Installation and operation

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.

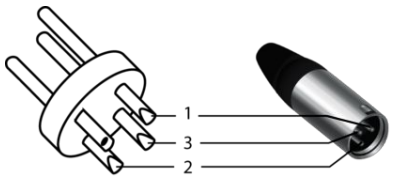
4.1 Pin assignment

You may use XLR connectors with either balanced or unbalanced pinout. Below you will find an overview of the different options.

XLR connectors for signal inputs

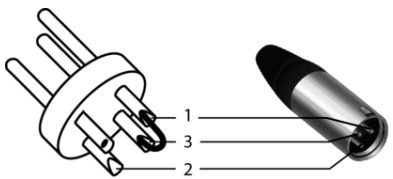
Balanced female XLR panel connectors are used for the signal inputs. The figures and tables show the XLR pin assignment.

Balanced pinout:



1	Ground, shielding
2	Positive signal (+)
3	Negative signal (–)

Unbalanced pinout:

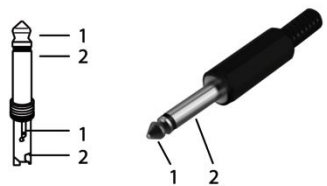


1	Ground, shielding
2	Signal
3	Jumpered with pin 1

Jack plugs for signal inputs

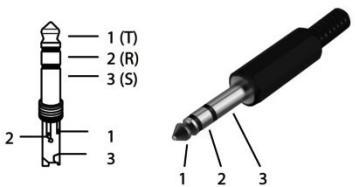
The figures and tables show the pin assignments of the ¼ inch (6.35 mm) jack plugs.

Unbalanced pinout of mono jack plug:

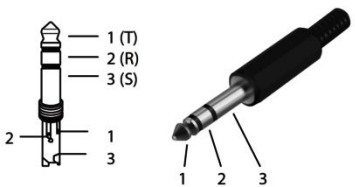


1	Signal
2	Ground, shielding

Unbalanced pinout of stereo jack plug:



1	Signal
2, 3	Ground, shielding



Balanced pinout of stereo jack plug:

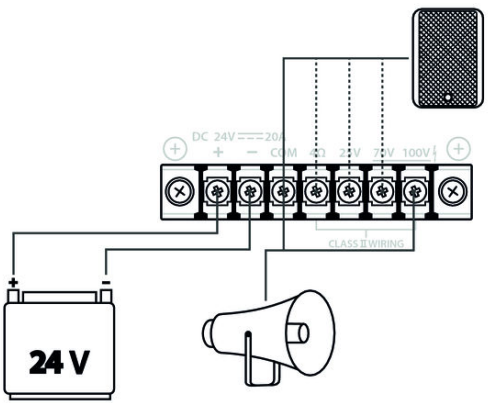
1	Positive signal (+)
2	Negative signal (–)
3	Ground, shielding

4.2 Screw terminal strips

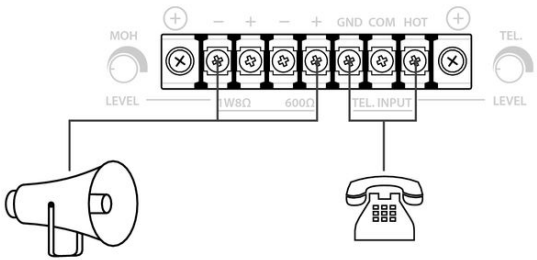
All loudspeaker units as well as the telephone system and the battery for mains-independent voltage supply are connected via two screw terminal strips on the rear side of the device.

First detach the covers of the screw terminal strips using a suitable screwdriver. Loosen the required screw terminals (see connection diagrams) and attach the necessary cables using a suitable screwdriver.

Left screw terminal strip for connecting a battery for mains-independent voltage supply and loudspeaker units:



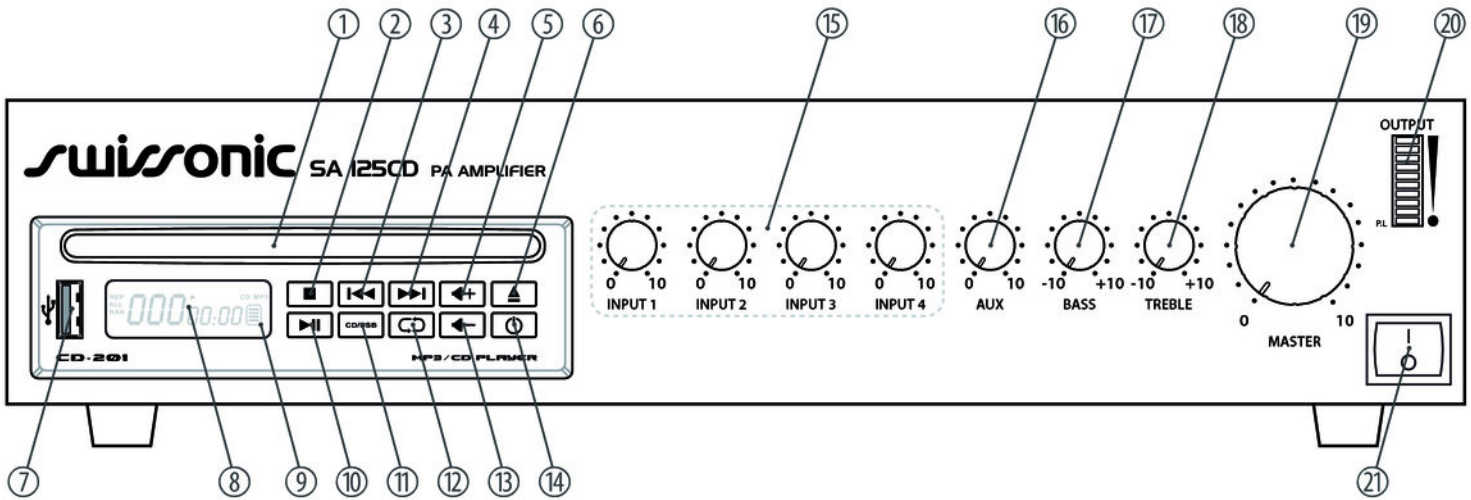
Right screw terminal strip for connecting loudspeaker units or monitors and a telephone system:



Finally check all cable connections for tightness and reattach the terminal screw strip covers to the device.

5 Connectors and controls

Front panel

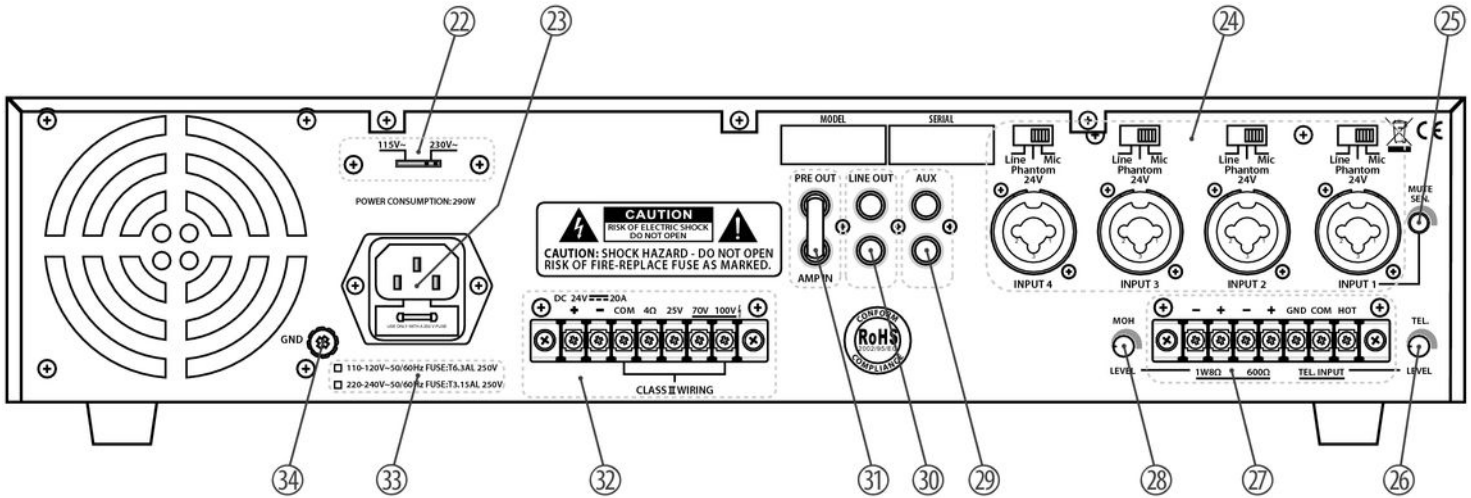


1	CD drive.
2	“Stop” button for stopping playback.
3	“Back” button for jumping to the previous track.
4	“Forward” button for jumping to the next track.
5	“Volume +” button.
6	“Eject CD” button.
7	USB port for external audio equipment.
8 + 9	LCD display with track and time information.
10	“Pause” button for pausing playback.
11	*[CD/USB]* button for switching between CD and USB device playback.
12	“Loop” button for playing tracks in a loop.
13	“Volume –” button.

14	Power on/off button for CD drive.
15	**INPUT 1 – 4** Volume controls for inputs 1 to 4.
16	**AUX** Volume control for the AUX input.
17	**BASS** Control for boosting/cutting the low frequencies. Starting from the neutral position, turn the control knob in clockwise or counterclockwise direction to boost or cut the bass frequencies by up to ± 10 dB.
18	**TREBLE** Control for boosting/cutting the high frequencies. Starting from the neutral position, turn the control knob in clockwise or counterclockwise direction to boost or cut the treble frequencies by up to ± 10 dB.
19	**MASTER** Volume control for the signal output of the mixer amplifier.

20	**OUTPUT** LED bar graph: The lowermost LED is permenently lit as long as the device is switched on. The upper LEDs indicate the strength of the output signal, depending on the position of the MASTER control.
21	Mains switch to turn the device on/off.

Rear panel


22
23
24
25
115V~
230V~
POWER CONSUMPTION: 290W
MODEL
SERIAL
CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN
CAUTION: SHOCK HAZARD - DO NOT OPEN
RISK OF FIRE-REPLACE FUSE AS MARKED.
PRE OUT
LINE OUT
AUX
AMP IN
Line Mic
Phantom 24V
INPUT 4
INPUT 3
INPUT 2
INPUT 1
MUTE SEN.
GND
110-120V~50/60Hz FUSE:T6.3AL 250V
220-240V~50/60Hz FUSE:T3.15AL 250V
DC 24V 20A
COM 4Ω 25V 70V 100V
CLASS III WIRING
RoHS
MOH
LEVEL
GND COM HOT
TEL.
1W8Ω 600Ω
TEL. INPUT
34
33
32
31
30
29
28
27
26

22	Selector switch for the supply voltage of the device (115 V or 230 V, factory-set value).
23	Plug for mains cable with fuse holder.
24	**INPUT 1 – 4** Signal inputs 1 to 4 (lockable combo XLR/jack sockets) with pertinent selector switches for input sensitivity (line / microphone) and phantom powering.
25	**MUTE SEN.** Priority control. This setting controls to which extent the volume levels of the other channels are decreased when a microphone signal (via INPUT 1) or a telephone signal (via TEL.INPUT) is output. Use a suitable screwdriver to turn the control knob into the desired position.
26	**TEL. LEVEL** Volume control for the telephone input of the mixer amplifier.
27	Right screw terminal strip: Monitor output and telephone input, see *Chapter 4.2 'Screw terminal strips' on page 17*.
28	**MOH LEVEL** Volume control for the monitor output and the AUX input of the mixer amplifier.

29	**AUX** RCA input jack for connecting an external audio device.
30	**LINE OUT** RCA output jack for connecting an external recording device.
31	**PRE OUT** / **AMP IN** These two RCA jacks are by default connected directly to each other with a jumper. If desired, they can be used for looping in an external equalizer or compressor or for controlling another power amplifier.
32	Left screw terminal strip for connecting a battery for mains-independent voltage supply and loudspeaker units, see *Chapter 4.2 'Screw terminal strips' on page 17*
33	Label indicating the factory-set supply voltage of the device (115 V or 230 V).
34	**GND** Connection screw for grounding cable.

6 Technical data

Output power	120 W (RMS)
Frequency range	80 Hz … 16 kHz (±3 dB)
Input sensitivity	AUX: –6 dBV (unbalanced) Phantom: –52 dBV / 24 V (balanced) Mic: –52 dBV (balanced) Line: –10 dBV (unbalanced) AMP IN: –0 dBV (unbalanced) TEL: –10 dBV (balanced)
Total harmonic distortion (THD)	≤1 %

Signal-to-noise ratio (SNR)	AUX: ≥ 80 dB Phantom: ≥ 65 dB Mic: ≥ 65 dB Line: ≥ 75 dB
Output impedance	COM, 4 Ω
Output voltage	25 V, 70 V, 100 V
Mains power supply	115/230 V ~ (AC), 50/60 Hz 24 V ⎓ (DC)
Power consumption	290 W
Dimensions (W × H × D)	16.54 in × 3.46 in × 12.99 in
Weight	26.01 lb

7 Protecting the environment

Disposal of the packaging material

For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device

This device is subject to the European directive 2002/96/EC.

Do not dispose of the device with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.